

Richard Dwyer <richard.dwyer@nwb-oen.ca>

### Fwd: NWB Water Licence 1BR-EKA for the FOX-C Dew Line Site, Ekalugad Fjord **Project**

Sonia Aredes <sonia.aredes@nwb-oen.ca> To: Richard Dwyer <richard.dwyer@nwb-oen.ca> Wed, Aug 30, 2017 at 10:50 AM

Hi Richard

Please, could you place this under the Applicant folder

**Thanks** 

----- Forwarded message ------

From: Jean Allen < Jean. Allen@aandc-aadnc.gc.ca>

Date: Wed, Aug 30, 2017 at 9:15 AM

Subject: NWB Water Licence 1BR-EKA for the FOX-C Dew Line Site, Ekalugad Fjord Project

To: sonia.aredes@nwb-oen.ca

Cc: Charlotte Lamontagne < Charlotte.Lamontagne@aandc-aadnc.gc.ca>

Good afternoon Sonia,

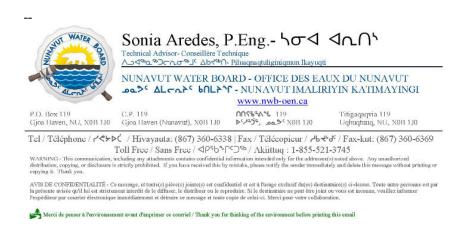
Please find attached our response to your email regarding our application for renewal of water licence 1BR-EKA1017 for long term monitoring at the FOX-C Ekalugad Fjord site.

Should you require additional information, please feel free to contact me.

Best regards,

Jean Allen Contaminants Specialist Indigenous and Northern Affairs Canada Nunavut Regional Office 969 Qimugjuk Building PO Box 2200, Iqaluit, NU X0A 0H0 Telephone: (867) 975-4732

Email: jean.allen@aandc-aadnc.gc.ca





🔁 1BR-EKA1017 Renewal Application - INAC Response to NWB.pdf

## Affaires autochtones et du Nord Canada

Nunavut Regional Office 969 Qimugjuk Building P.O. Box 2200 Iqaluit, NU XOA 0H0

August 24, 2017

Sonia Aredes Technical Advisor Nunavut Water Board Gjoa Haven, NU XOB 1J0

# Re: 1BR-EKA1017 - FOX-C Ekalugad Fjord Long Term Monitoring Program - Water Licence Renewal Application

Thank you for your email on August 16, 2017 requesting more information in regards to a submission by Indigenous and Northern Affairs Canada Water Resources Division.

Part J, Item 2 of water licence 1BR-EKA1017 required an addendum to the approved long term monitoring (LTM) plan that includes the following information:

- a. Section 2.2.3 should include 'ponding' and 'erosion' under visual monitoring;
- b. The plan shall state how the Licensee will comply with thermal monitoring requirement from the preceding licence, Part K, Item 14;
- c. The plan should include monitoring for the fuel storage pad, sewage lagoons, hazardous waste processing area, beach tank demolition and land filing area, asbestos abatement area, temporary PCB and hazardous waste storage areas and landfarm for at least one of the first few site monitoring visits;
- d. Include reference to the Long Term Monitoring Report required under Part J, Item 7;
- e. Identify each monitoring point including key visual monitoring areas to increase consistency;
- f. Include the requirement for field blanks under the Quality Assurance/Quality Control section; and
- g. Provide threshold limits for monitoring where facilities will be considered to have failed.

#### The requested information is provided below:

- a. Section 2.2.3 includes 'erosion' under visual monitoring and while 'ponding' is not specifically mentioned in the plan, it is a feature that is monitored during every site visit. Evidence of ponding (if it is observed) will be noted under settlement, erosion, or seepage depending on the cause of the ponding.
- b. Part K, Item 14 in the previous water licence 1BR-EKA0809 required thermal monitoring and groundwater monitoring in the post-remediation monitoring plan. A LTM plan has since been submitted to the Nunavut Water Board and approved under the existing water licence 1BR-EKA1017. Based on site-specific conditions and the design of the non-hazardous waste landfill (NHWL), thermal monitoring was not required. This is consistent with the Abandoned Military Site Remediation Protocol (AMSRP) which requires thermal monitoring for leachate contained landfills and new Tier II soil facilities but not for NHWLs.

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- c. The fuel storage pad, sewage lagoons, hazardous waste processing area, beach tank demolition and land filling area, asbestos abatement area, temporary PCB and hazardous waste storage areas and landfarm no longer exist at the FOX-C site. The only facility that remains on site is the NHWL. Thus, the LTM plan includes the NHWL and surrounding areas only.
- d. Part J, Item 7 requires the submission of a monitoring report at a minimum of 6 months prior to the expiry of the licence. Monitoring reports are submitted with annual reports in accordance with the LTM schedule. The last one submitted was for year 8 in March 2017.
- e. The coordinates for active layer monitoring wells are provided in the annual reports and a photo log of NHWL monitoring points exists to ensure consistency between site visits.
- f. The QA/QC program includes the collection of duplicates, field blanks, trip blanks, and equipment blanks as required. These duplicates are in addition to the any duplicates and replicates analyzed as part of the standard lab QA/QC procedures.
- g. There are no threshold limits for monitoring where facilities will be considered to have failed. However, a stability assessment matrix is available in the AMSRP, Volume II (2008) and is used to determine the potential for landfill failure. The performance of the landfill is site-specific and is based on the physical integrity of the landfill as well as the results of analyses of groundwater (as well as soil, sediment, and ground temperature where applicable). As such, the results are interpreted in concert with one another and should monitoring results indicate potential, imminent, or actual failure, an assessment of the potential cause of failure will be carried out and appropriate remediation requirements will be implemented.

I hope the information above meets the requirements of the Nunavut Water Board. Should you still require an addendum, or should you have any questions or concerns, please contact Jean Allen at jean.allen@aandc.gc.ca.

Thank you,

Charlotte Lamontagne

**Director, Contaminated Sites**